

NEW ISSUE

EVENING AND NIGHT WORK

NOVEMBER 1976

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AUSTRALIAN BUREAU OF STATISTICS Canberra

EVENING AND NIGHT WORK, NOVEMBER 1976

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INQUIRIES

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CONTENTS

Table	Page
.. Explanatory Notes	2
All employees	
1 Whether worked in the evening/at night, occupation and full-time or part-time status	4
2 Whether worked in the evening/at night and distance to work	5
3 Whether worked in the evening/at night and family status	6
Employees who worked in the evening or at night	
4 Periods of work and industry	7
5 Periods of work and occupation	8
6 Type of work and frequency	9
7 Type of work and industry	9
8 Type of work and occupation	10
9 Birthplace and industry	10
10 Birthplace and period of arrival in Australia and type of work	11
11 Marital status and full-time or part-time status	12
12 Family status and type of work	13
Employees who worked paid shift work, paid roster system or other paid arrangements in the evening or at night	
13 Change in starting time and frequency	14
14 Change in starting time and industry	14
15 Starting time and industry	15
16 Distance to work, starting time and marital status	16
17 Advantages and disadvantages and age	17
18 Advantages and disadvantages and marital status	18
19 Advantages and disadvantages and family status	18
.. Technical note	19

EXPLANATORY NOTES

Introduction

In November 1976 a survey, based on the quarterly population survey, was conducted throughout Australia in order to obtain information about the number of wage earners who, in their main job had worked between 7.00pm and 5.30am at any time during a specified four-week period.

2. Some preliminary results of the survey were published on 30 May 1977 in *Evening and Night Work, November 1976 (Preliminary)* (6326.0). This bulletin provides revised and more detailed estimates. Some additional estimates, including those for States and Territories, are available on request.

3. Employed wage and salary earners are referred to in this bulletin as "employees".

4. The estimates in Tables 13 to 19 refer only to employees who in their main job had worked paid shiftwork, paid roster work or other paid arrangements between 7.00pm and 5.30am at any time during a specified four-week period. Excluded are persons who worked paid overtime, unpaid work or were "on call" in the evening or at night; these persons are included in Tables 1-12.

The population survey

5. The survey is based on a multi-stage area sample of private dwellings (about 30,000 houses, flats, etc.) and non-private dwellings (hotels, motels, etc.), and covers about two-thirds of one per cent of the population of Australia. The information is obtained by carefully chosen and specifically trained interviewers. Interviews are carried out during a period of four weeks.

6. It should be noted that, because of practical considerations concerning the questions relating to advantages and disadvantages of evening and night work, the sample was reduced to cover slightly less than one-sixth of one per cent of the population of Australia for this topic, the results of which are shown in Tables 17-19. The respondents for these questions were selected from a multi-stage area sample of private dwellings (about 8,000 houses, flats, etc.). Non-private dwellings (hotels, motels, etc.) were not included in the sample.

Scope

7. The estimates relate to all persons aged 15 years and over who were employees in their main job, except persons in institutions, members of the permanent defence forces and certain diplomatic personnel customarily excluded from census and estimated populations. Persons in institutions are those who were patients in hospitals and sanatoria, or inmates of gaols, reformatories, etc., and for whom, for the purpose of the survey, the institution was regarded as their dwelling. The scope of Tables 17-19 differs from that of other tables (see paragraph 6 above).

Definitions

8. *Employees who worked in the evening or at night* are wage and salary earners who had worked in their main job at any time between 7.00pm and 5.30am on at least one occasion in the four weeks before the interview. Evening and night work includes work done at home (e.g. unpaid work at home by executives or teachers).

9. *Type of evening or night work.* Respondents were asked to choose, in respect of any employee who had worked in the evening or at night, the classification which *best described* the type of work in which the employee had been engaged. The classification of type of work shown in this bulletin should therefore be used with caution because, although employees were coded to only one classification, it does not necessarily follow that they had engaged in only one type of evening or night work in the four-week period. Persons classified as "on call" were employees on stand-by who had been called out in the evening or at night during the period.

10. *Full-time employees* are those who usually work 35 hours or more per week and others who, although usually part-time workers, worked 35 hours or more during the survey week. *Part-time employees* are those who usually work less than 35 hours per week and who did so during the survey week. When recording hours of work, fractions of an hour are disregarded.

11. A *family* was generally defined to consist of two or more persons living in the same household at the time of the survey, comprising the head of the family and spouse (if any) and any persons having any of the following relationships to them:

- (i) sons or daughters of any age, if not married and not accompanied by children of their own
- (ii) brothers or sisters, if not married and not accompanied by parents or children of their own
- (iii) grandchildren, if not married and not accompanied by either of their parents, nor by children of their own
- (iv) ancestors, if not married and not accompanied by children under 15 years of age of their own; or
- (v) any children under 15 years of age not accompanied by a parent, unless related to some person in a second family in the household.

12. The following points should be noted in relation to the definition of a family in the previous paragraph:

- (i) family status was determined at the time of the survey. Thus, if members of the family were absent (e.g. children at boarding schools) the family status of the head and other family members could have been affected
- (ii) the term *relationship* includes relationships by blood, marriage or adoption
- (iii) the marriage relationship includes legal and de facto relationships
- (iv) the term *not married* comprises never married, widowed, divorced and permanently separated persons
- (v) a family, as defined, can contain no more than two married persons, and can contain two married persons only if these persons are husband and wife.

13. *Dependent children* comprise all family members under 15 years of age and all family members aged 15 to 20 years who are full-time students.

Industry and occupation classifications

14. In this survey industry was classified according to the Australian Standard Industrial Classification (ASIC). The occupation classification is that adopted for the 1971 Census of Population and Housing.

Reliability of the estimates

15. Since the estimates in this bulletin are based on information obtained from occupants of a sample of dwellings they may differ from the figures that would

have been produced if the information had been obtained from occupants of all dwellings. An indication of the likely differences is given in the Technical Note, page 19.

Related publications

16. Other ABS publications which may be of interest include

- . *The Labour Force* (Quarterly) (6203.0)
- . *The Labour Force* (Annual) (6204.0)
- . *Work Patterns of Employees* (6327.0)

All publications produced by the ABS are listed in *Catalogue of Publications 1977* (1101.0) which is available free of charge from any ABS office.

Symbols and other usages

- * Subject to sampling variability too high for most practical uses.
- .. Not applicable.

Any discrepancies between totals and sums of components in tables are due to rounding. The figures showing the average number of times worked have been rounded to the nearest whole number.

R. J. CAMERON
Australian Statistician

TABLE 1. ALL EMPLOYEES (a) : WHETHER WORKED IN THE EVENING/AT NIGHT (a),
OCCUPATION (a) AND FULL-TIME OR PART-TIME STATUS (a), NOVEMBER 1976

(000)

Major occupation group	Worked in the evening/at night			Did not work in the evening/at night			Total		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
FULL-TIME EMPLOYEES									
Professional and technical	131.2	111.3	242.5	227.8	119.9	347.7	359.0	231.2	590.2
Administrative, executive and managerial	91.2	7.2	98.5	143.1	10.3	153.3	234.3	17.5	251.8
Clerical	46.2	36.5	82.7	270.9	434.1	705.0	317.1	470.6	787.7
Sales	50.0	21.7	71.8	120.1	89.3	209.3	170.1	111.0	281.1
Farmers, fishermen, timbergetters, etc.	16.7	*	17.9	97.0	5.5	102.5	113.7	6.7	120.4
Miners, quarrymen and related workers	15.7	*	15.7	13.9	*	13.9	29.6	*	29.6
Transport and communication workers	87.5	10.8	98.2	140.3	20.2	160.6	227.8	31.0	258.8
Tradesmen, production-process workers and labourers, n.e.c.	253.8	20.8	274.6	1,146.9	179.3	1,326.2	1,400.7	200.1	1,600.8
Service, sport and recreation	86.1	49.1	135.2	65.2	97.7	162.9	151.3	146.8	298.1
Total	778.4	258.6	1,037.0	2,225.2	956.3	3,181.5	3,003.6	1,214.9	4,218.5
PART-TIME EMPLOYEES									
Professional and technical	6.2	28.5	34.7	14.3	62.1	76.4	20.5	90.6	111.1
Clerical	*	29.7	31.5	6.7	113.8	120.5	8.5	143.5	152.0
Sales	7.1	26.5	33.6	17.9	77.8	95.6	25.0	104.3	129.2
Tradesmen, production-process workers and labourers, n.e.c.	7.5	4.2	11.8	26.4	30.7	57.0	33.9	34.9	68.8
Service, sport and recreation	12.6	60.9	73.5	14.4	121.6	136.0	27.0	182.5	209.5
Total (b)	39.8	152.5	192.3	97.3	425.2	522.5	137.1	577.7	714.8
ALL EMPLOYEES									
Professional and technical	137.4	139.8	277.2	242.1	182.0	424.1	379.5	321.8	701.3
Administrative, executive and managerial	91.8	7.8	99.5	146.1	15.1	161.3	237.9	22.9	260.8
Clerical	48.0	66.2	114.2	277.6	547.9	825.5	325.6	614.1	939.7
Sales	57.1	48.2	105.4	138.0	167.1	304.9	195.1	215.3	410.3
Farmers, fisherman, timbergetters, etc.	17.4	*	18.8	107.4	13.0	120.3	124.8	14.4	139.1
Miners, quarrymen and related workers	16.4	*	16.4	13.9	*	13.9	30.3	*	30.3
Transport and communication workers	90.1	12.7	102.8	144.5	27.1	171.7	234.6	39.8	274.5
Tradesmen, production-process workers and labourers, n.e.c.	261.3	25.0	286.4	1,173.3	210.0	1,383.2	1,434.6	235.0	1,669.6
Service, sport and recreation	98.7	109.9	208.7	79.6	219.4	298.9	178.3	329.3	507.6
Total	818.2	411.1	1,229.3	2,322.5	1,381.5	3,704.0	3,140.7	1,792.6	4,933.3

(a) For definitions, see pages 2 and 3. (b) Includes administrative, executive and managerial workers; farmers, fishermen and timbergetters; miners, quarrymen and related workers, etc. and transport and communication workers.

* Less than 4,000. See page 19 paragraph 5.

TABLE 2. ALL EMPLOYEES (a) : WHETHER WORKED IN THE EVENING/AT NIGHT (a)
AND DISTANCE TO WORK, NOVEMBER 1976

Whether worked in the evening/at night (a)	Distance to work (kilometres)							Total
	No set place of work	Less than 1	1 and less than 2	2 and less than 8	8 and less than 16	16 and less than 32	32 and over	
NUMBER OF EMPLOYEES ('000)								
Males –								
Worked (a)	43.7	78.9	91.8	217.9	188.7	142.0	55.3	818.2
Did not work	144.7	169.1	256.8	649.1	542.4	410.6	149.8	2,322.5
Total	188.3	248.0	348.6	867.0	731.1	552.6	205.1	3,104.7
Females –								
Worked (a)	10.7	64.9	63.4	127.7	86.6	44.6	13.2	411.1
Did not work	23.9	156.9	220.9	449.0	309.3	171.8	49.7	1,381.5
Total	34.7	221.8	284.3	576.7	395.9	216.4	62.9	1,792.6
Persons –								
Worked (a)	54.4	143.8	155.1	345.6	275.3	186.6	68.5	1,229.3
Did not work	168.6	326.0	477.7	1,098.0	851.7	582.4	199.5	3,704.0
Total	223.0	469.8	632.8	1,443.6	1,127.0	769.0	268.0	4,933.3
PROPORTION OF TOTAL (per cent)								
Males –								
Worked (a)	5.3	9.6	11.2	26.6	23.1	17.4	6.8	100.0
Did not work	6.2	7.3	11.1	27.9	23.4	17.7	6.5	100.0
Total	6.0	7.9	11.1	27.6	23.3	17.6	6.5	100.0
Females –								
Worked (a)	2.6	15.8	15.4	31.1	21.1	10.9	3.2	100.0
Did not work	1.7	11.4	16.0	32.5	22.4	12.4	3.6	100.0
Total	1.9	12.4	15.9	32.2	22.1	12.1	3.5	100.0
Persons –								
Worked (a)	4.4	11.7	12.6	28.1	22.4	15.2	5.6	100.0
Did not work	4.6	8.8	12.9	29.6	23.0	15.7	5.4	100.0
Total	4.5	9.5	12.8	29.3	22.8	15.6	5.4	100.0

(a) For definitions see page 2, paragraphs 4 and 8.

TABLE 3. ALL EMPLOYEES (a) : WHETHER WORKED IN THE EVENING/AT NIGHT (a)
AND FAMILY STATUS (a), NOVEMBER 1976

('000)

<i>Family status (a)</i>	<i>Worked in the evening/at night (a)</i>	<i>Did not work in the evening/at night</i>	<i>Total</i>
MALES			
Member of a family	716.0	2,053.1	2,769.1
Husband	604.0	1,510.9	2,114.9
with dependent children (a) present	436.4	938.2	1,374.6
without dependent children (a) present	167.6	572.8	740.3
Not married (b) head of family	11.0	40.2	51.2
with dependent children (a) present	4.5	15.5	20.0
without dependent children (a) present	6.5	24.7	31.2
Student aged 15-20 years	9.9	22.3	32.2
Other child (c)	83.0	450.4	533.5
Other relative (parent, brother, etc.)	8.1	29.2	37.3
Not a member of a family	102.2	269.4	371.6
Total	818.2	2,322.5	3,140.7
FEMALES			
Member of a family	326.0	1,202.1	1,528.2
Wife	229.0	829.7	1,058.7
Not married (b) head of family	23.4	73.2	96.6
with dependent children (a) present	15.9	45.3	61.2
without dependent children (a) present	7.5	27.9	35.4
Student aged 15-20 years	14.5	20.7	35.1
Other child (c)	54.6	258.8	313.4
Other relative (parent, sister, etc.)	4.5	19.8	24.3
Not a member of a family	85.1	179.3	264.4
Total	411.1	1,381.5	1,792.6

(a) For definitions, see pages 2 and 3, paragraphs 8-13. (b) Never married, widowed, divorced and permanently separated. (c) Of any age. (d) Persons living alone or not related to any other member of the household in which they were living.

TABLE 4. EMPLOYEES WHO WORKED IN THE EVENING/AT NIGHT (a) : PERIODS OF WORK AND INDUSTRY, NOVEMBER 1976

Industry	Worked only between 7.00p.m. and midnight ('000)	Worked only between midnight and 5.30a.m. ('000)	Worked in both periods (b) ('000)	Total ('000)	Proportion of all employees (c) (per cent)	Average number of times worked (d) (number)	Employees at work at 1.00a.m. (e) ('000)
MALES							
Agriculture, forestry, fishing and hunting	9.5	*	5.0	18.0	18.5	11	*
Mining	10.5	*	14.9	28.4	42.4	12	17.9
Manufacturing	101.0	15.5	103.1	220.1	24.4	10	99.4
Food, beverages and tobacco	10.3	9.4	22.0	41.7	28.3	13	23.4
Metal products	20.5	*	29.6	51.5	30.0	10	29.2
Other manufacturing	70.2	4.6	52.1	127.0	21.7	10	46.9
Electricity, gas and water	6.9	*	9.1	16.7	18.7	7	9.5
Construction	20.3	*	6.2	29.3	8.9	8	5.4
Wholesale and retail trade	94.1	10.6	17.1	121.8	22.2	7	14.5
Wholesale trade	34.2	*	8.9	47.0	21.0	8	7.2
Retail trade	59.9	6.8	8.1	74.8	23.0	7	7.3
Transport and storage; communication	45.8	*	55.5	105.6	33.4	9	51.0
Finance, insurance, real estate and business services	39.1	*	7.7	48.0	23.7	8	7.6
Public administration and defence (f)	22.2	*	6.4	29.9	16.3	7	6.5
Community services	87.6	*	45.5	136.3	46.3	9	43.9
Entertainment, recreation, restaurants hotels and personal services	46.1	*	16.0	64.1	57.8	12	15.6
Total	483.1	48.0	287.1	818.2	26.1	9	274.2
FEMALES							
Manufacturing	20.4	*	8.5	30.2	9.8	12	8.2
Wholesale and retail trade	70.0	*	*	73.7	18.6	5	*
Wholesale trade	6.1	*	*	7.3	8.7	8	*
Retail trade	63.9	*	*	66.4	21.3	5	*
Transport and storage; communication	14.3	*	*	16.4	26.4	10	*
Finance, insurance, real estate and business services	17.9	*	*	20.0	10.4	9	*
Public administration and defence (f)	5.7	*	*	7.1	8.0	6	*
Community services	131.2	*	49.6	182.2	35.0	9	46.0
Entertainment, recreation, restaurants, hotels and personal services	63.7	*	10.8	75.7	42.8	9	10.7
Total (g)	328.0	6.0	77.1	411.1	22.9	9	71.0
PERSONS							
Agriculture, forestry, fishing and hunting	10.9	4.2	5.0	20.0	18.0	11	*
Mining	11.1	*	14.9	29.2	40.8	12	17.9
Manufacturing	121.4	16.6	112.2	250.3	20.7	11	107.6
Food, beverages and tobacco	12.0	10.6	23.6	46.2	23.7	13	25.3
Metal products	22.6	*	30.7	54.7	27.6	10	30.3
Other manufacturing	86.8	4.6	57.9	149.4	18.3	10	52.1
Electricity, gas and water	7.8	*	9.1	17.6	17.9	7	9.5
Construction	22.1	*	6.4	31.4	9.0	8	5.4
Wholesale and retail trade	164.2	11.1	20.3	195.5	20.7	6	17.1
Wholesale trade	40.3	4.0	10.0	54.3	17.7	8	7.9
Retail trade	123.8	7.1	10.3	141.2	22.2	6	9.2
Transport and storage; communication	60.1	4.6	57.3	122.0	32.2	10	52.7
Finance, insurance, real estate and business services	56.9	*	9.5	68.0	17.2	8	8.8
Public administration and defence (f)	27.9	*	7.7	37.0	13.6	7	7.2
Community services	218.8	4.6	95.1	318.5	39.1	9	90.0
Entertainment, recreation, restaurants, hotels and personal services	109.8	*	26.8	139.8	48.6	11	26.3
Total	811.0	54.0	364.3	1,229.3	24.9	9	345.2

(a) For definition see page 2, paragraph 8. (b) Employees who had worked between 7.00p.m. and midnight, and between midnight and 5.30a.m. in the four-week period, but not necessarily on the same occasion. (c) Proportion of employees in each industry who worked in the evening/at night. (d) Within the four-week period. (e) On at least one occasion in the four-week period. (f) Excludes permanent defence forces. (g) Includes industries for which details are not shown separately.

* Less than 4,000. See page 19, paragraph 5.

TABLE 5. EMPLOYEES WHO WORKED IN THE EVENING/AT NIGHT (a) : PERIODS OF WORK AND OCCUPATION, NOVEMBER 1976

Major occupation group	Worked only between 7.00 p.m. and midnight ('000)	Worked only between midnight and 5.30a.m. ('000)	Worked in both periods (b) ('000)	Total ('000)	Proportion of all employees (c) (per cent)	Average number of times worked (d) (number)	Employees at work at 1.00a.m. (e) ('000)
MALES							
Professional and technical	104.1	*	31.3	137.4	36.2	8	29.8
Administrative, executive and managerial	74.2	*	16.1	91.8	38.6	8	13.7
Clerical	37.0	*	10.0	48.0	14.7	6	9.1
Sales	52.2	*	*	57.1	29.3	7	*
Farmers, fishermen, timbergetters, etc.	10.4	*	*	17.4	14.0	10	*
Miners, quarrymen and related workers	6.6	*	7.9	16.4	53.9	13	9.7
Transport and communication workers	30.7	10.3	49.1	90.1	38.4	11	45.5
Tradesmen, production-process workers and labourers, n.e.c.	117.2	22.0	122.1	261.3	18.2	10	119.4
Service, sport and recreation	50.6	*	44.3	98.7	55.4	11	42.8
Total	483.1	48.0	287.1	818.2	26.1	9	274.2
FEMALES							
Professional and technical	101.8	*	37.6	139.8	43.5	9	34.7
Administrative, executive and managerial	7.3	*	*	7.8	33.9	6	*
Clerical	61.1	*	5.1	66.2	10.8	6	*
Sales	46.6	*	*	48.2	22.4	5	*
Transport and communication workers	11.4	*	*	12.7	31.9	10	*
Tradeswomen, production-process workers and labourers, n.e.c.	16.3	*	7.7	25.0	10.7	13	7.5
Service, sport and recreation	82.6	*	24.2	109.9	33.4	11	22.4
Total (f)	328.0	6.0	77.1	411.1	22.9	9	71.0
PERSONS							
Professional and technical	205.9	*	68.9	277.2	39.5	9	64.6
Administrative, executive and managerial	81.5	*	16.3	99.5	38.2	8	13.7
Clerical	98.1	*	15.1	114.2	12.2	6	12.7
Sales	98.8	*	4.0	105.4	25.7	6	*
Farmers, fishermen, timbergetters, etc.	11.2	*	*	18.8	13.5	10	*
Miners, quarrymen and related workers	6.6	*	7.9	16.4	53.9	13	9.7
Transport and communication workers	42.1	10.8	50.0	102.8	37.5	11	47.1
Tradesmen, production-process workers and labourers, n.e.c.	133.5	23.0	129.8	286.4	17.2	10	126.9
Service, sport and recreation	133.2	6.9	68.5	208.7	41.1	11	65.1
Total	811.0	54.0	364.3	1,229.3	24.9	9	345.2

(a) For definition see page 2 paragraph 8. (b) Employees who had worked between 7.00p.m. and midnight and between midnight and 5.30a.m. in the four-week period, but not necessarily on the same occasion. (c) Proportion of employees in each occupation group who worked in the evening/at night. (d) Within the four-week period. (e) On at least one occasion in the four-week period. (f) Includes farmers, fisherwomen, timbergetters, etc. and miners, quarrywomen and related workers.

* Less than 4,000. See page 19, paragraph 5.

TABLE 6. EMPLOYEES WHO WORKED IN THE EVENING/AT NIGHT (a) : TYPE OF WORK (a) AND FREQUENCY (a), NOVEMBER 1976

Type of work (a)	Number of times worked (b)						Total	Average number of times worked (b)
	One	2-5	6-10	11-15	16-20	21 and over		
— '000 —								(number)
MALES								
Paid work —								
Overtime	34.9	57.3	20.0	7.3	4.9	*	126.6	5
Other (b)	14.0	93.8	128.6	81.4	95.9	27.7	441.4	12
Total	48.9	151.1	148.6	88.7	100.8	29.9	567.9	10
Unpaid work	17.4	78.8	45.9	21.2	21.4	8.2	192.9	8
On call	7.9	23.0	10.1	5.4	6.8	4.3	57.4	8
Total	74.2	252.9	204.5	115.2	129.0	42.4	818.2	9
FEMALES								
Paid work —								
Overtime	12.1	26.1	4.1	*	*	*	43.0	3
Other (b)	13.6	91.8	82.9	39.0	52.3	8.8	288.4	9
Total	25.6	117.9	87.0	39.3	52.8	8.8	331.5	9
Unpaid work	6.1	21.3	13.4	9.0	9.9	*	61.6	9
On call	*	7.9	4.0	*	*	*	18.0	9
Total	33.2	147.2	104.4	49.8	63.7	12.9	411.1	9
PERSONS								
Paid work —								
Overtime	47.0	83.4	24.1	7.6	5.4	*	169.6	4
Other (b)	27.5	185.6	211.5	120.4	148.2	36.5	729.8	11
Total	74.5	269.0	235.6	128.0	153.6	38.7	899.4	10
Unpaid work	23.5	100.2	59.3	30.2	31.3	10.1	254.5	8
On call	9.3	30.9	14.1	6.9	7.8	6.5	75.4	8
Total	107.4	400.1	309.0	165.0	192.6	55.3	1,229.3	9

For footnotes see Table 8.

* Less than 4,000. See page 19, paragraph 5.

TABLE 7. EMPLOYEES WHO WORKED IN THE EVENING/AT NIGHT (a) : TYPE OF WORK AND INDUSTRY (a), NOVEMBER 1976

Industry	Paid work			Unpaid work	On call	Total	
	Overtime	Other (c)	Total			Persons	Proportion of employees (d)
	— '000 —					— per cent —	
Agriculture, forestry, fishing and hunting	*	6.5	8.7	10.0	*	20.0	17.9
Mining	*	24.3	27.3	*	*	29.2	40.8
Manufacturing	48.4	157.3	205.7	35.9	8.7	250.3	20.7
Food, beverages and tobacco	6.2	34.5	40.7	*	*	46.2	23.7
Metal products	10.9	37.5	48.5	4.7	*	54.7	27.6
Other manufacturing	31.3	85.2	116.5	28.5	4.4	149.4	18.3
Electricity, gas and water	*	9.5	13.5	*	*	17.6	17.9
Construction	9.0	8.9	17.9	9.4	4.1	31.4	9.0
Wholesale and retail trade	38.8	99.4	138.2	45.9	11.4	195.5	20.7
Wholesale trade	12.4	12.2	24.6	25.0	4.7	54.3	17.7
Retail trade	26.4	87.2	113.6	20.9	6.8	141.2	22.2
Transport and storage; communication	17.0	91.7	108.8	5.8	7.5	122.0	32.2
Finance, insurance, real estate and business services	12.4	24.8	37.2	27.2	*	68.0	17.2
Public administration and defence (e)	9.5	11.8	21.3	12.3	*	37.0	13.6
Community services	14.4	183.6	198.0	99.2	21.3	318.5	39.1
Entertainment, recreation, restaurants, hotels and personal services	10.9	112.0	122.9	6.9	10.0	139.8	48.6
Total	169.6	729.8	899.4	254.5	75.4	1,229.3	24.9

For footnotes see Table 8.

* Less than 4,000. See page 19, paragraph 5.

TABLE 8. EMPLOYEES WHO WORKED IN THE EVENING/AT NIGHT (a) : TYPE OF WORK AND OCCUPATION (a), NOVEMBER 1976

Major occupation group	Paid work			Unpaid work	On call	Total	
	Overtime	Other (c)	Total			Persons	Proportion of employees (d)
	- '000 -						- per cent -
Professional and technical	17.0	119.0	136.0	120.0	21.2	277.2	39.5
Administrative, executive and managerial	5.8	17.5	23.3	65.7	10.5	99.5	38.2
Clerical	33.7	57.7	91.4	19.4	*	114.2	12.2
Sales	17.0	61.1	78.2	21.0	6.2	105.4	25.7
Farmers, fishermen, timbergetters, etc.	*	6.1	8.2	8.8	*	18.8	13.5
Miners, quarrymen and related workers	*	15.0	16.2	*	*	16.4	54.1
Transport and communication workers	15.0	80.1	95.0	*	5.8	102.8	37.4
Tradesmen, production-process workers and labourers, n.e.c.	66.1	193.3	259.4	13.1	13.9	286.4	17.2
Service, sport and recreation	11.6	180.0	191.7	4.5	12.5	208.7	41.1
Total	169.6	729.8	899.4	254.5	75.4	1,229.3	24.9
	- per cent -						
Proportion of all persons working in the evening/at night	13.8	59.4	73.2	20.7	6.1	100.0	..

(a) For definitions see page 2, paragraphs 8 and 9. (b) Within the four-week period. (c) Comprises paid shiftwork, paid roster work and other paid arrangements but excludes "on call". (d) Proportion of employees in each occupation group who worked in the evening/at night. (e) Excludes permanent defence forces.

* Less than 4,000. See page 19, paragraph 5.

TABLE 9. EMPLOYEES WHO WORKED IN THE EVENING/AT NIGHT (a) : BIRTHPLACE AND INDUSTRY, NOVEMBER 1976

Industry	Born outside Australia					
	In main English-speaking countries (b)	In other countries	Total		Born in Australia	Total
			Persons	Proportion of total (c)		
			('000)	('000)		
Agriculture, forestry, fishing and hunting	*	*	*	*	17.7	20.0
Mining	4.5	*	6.8	23.3	22.4	29.2
Manufacturing	35.8	66.8	102.6	41.0	147.7	250.3
Food, beverages and tobacco	5.4	9.6	15.0	32.6	31.1	46.2
Metal products	8.8	17.3	26.1	47.6	28.7	54.7
Other manufacturing	21.6	39.9	61.5	41.1	87.9	149.4
Electricity, gas and water	*	*	*	*	13.7	17.6
Construction	*	4.6	8.0	25.5	23.4	31.4
Wholesale and retail trade	28.6	16.0	44.6	22.8	151.0	195.5
Wholesale trade	9.6	5.3	14.8	27.3	39.5	54.3
Retail trade	19.0	10.7	29.7	21.1	111.5	141.2
Transport and storage; communication	13.1	14.5	27.6	22.6	94.4	122.0
Finance, insurance, real estate and business services	11.7	4.8	16.5	24.3	51.4	68.0
Public administration and defence (d)	*	*	7.1	19.0	30.0	37.0
Community services	44.1	27.2	71.3	22.4	247.2	318.5
Entertainment, recreation, restaurants, hotels and personal services	18.7	18.6	37.2	26.6	102.5	139.8
Total	166.2	161.7	328.0	26.7	901.4	1,229.3

(a) For definition, see page 2, paragraph 8. (b) Born in United Kingdom, Ireland, Canada, U.S.A., New Zealand and South Africa. (c) Proportion of all employees who worked in the evening/at night who were born outside Australia. (d) Excludes permanent defence forces.

* Less than, or based on a figure less than 4,000. See page 19, paragraph 5.

TABLE 10. EMPLOYEES WHO WORKED IN THE EVENING/AT NIGHT (a) : BIRTHPLACE,
PERIOD OF ARRIVAL IN AUSTRALIA AND TYPE OF WORK (a), NOVEMBER 1976

Birthplace and period of arrival	Paid work			Unpaid work	On call	Total	Average number of times worked (c)
	Overtime	Other (b)	Total				
- '000 -							- Number -
MALES							
Born in Australia	90.9	303.5	394.5	151.5	44.6	590.5	9
Born outside Australia -							
Arrived - before 1960	16.5	51.8	68.2	17.3	5.8	91.3	10
1960-1966	6.7	30.9	37.6	9.2	*	49.4	10
1967-1973	9.0	43.8	52.8	11.1	*	67.2	11
1974-Nov. 1976	*	11.4	14.8	*	*	19.9	11
Total born outside Australia	35.6	137.8	173.5	41.4	12.8	227.7	10
Total	126.6	441.4	567.9	192.9	57.4	818.2	9
FEMALES							
Born in Australia	32.4	216.4	248.8	48.0	14.1	310.9	8
Born outside Australia -							
Arrived - before 1960	*	23.9	26.7	5.5	*	33.9	9
1960-1966	*	20.0	22.9	*	*	27.1	10
1967-1973	4.2	21.2	25.4	*	*	28.2	11
1974-Nov. 1976	*	6.9	7.8	*	*	11.1	11
Total born outside Australia	10.7	72.0	82.7	13.6	4.0	100.2	10
Total	43.0	288.4	331.4	61.6	18.0	411.1	9
PERSONS							
Born in Australia	123.3	519.9	643.2	199.5	58.6	901.4	9
Born outside Australia -							
In main English-speaking countries (d) -							
Arrived - before 1960	7.0	26.0	32.9	10.8	*	47.6	9
1960-1966	6.4	25.4	31.8	9.4	*	44.0	8
1967-1973	8.1	32.8	40.9	10.7	*	54.7	9
1974-Nov. 1976	*	9.5	12.3	5.9	*	20.0	10
Total	24.2	93.7	117.9	36.8	11.5	166.2	9
In other countries -							
Arrived - before 1960	12.2	49.7	62.0	12.0	*	77.6	10
1960-1966	*	25.5	28.7	*	*	32.4	12
1967-1973	5.1	32.2	37.2	*	*	40.7	13
1974-Nov. 1976	*	8.7	10.2	*	*	11.0	12
Total	22.1	116.1	138.2	18.3	5.3	161.7	11
Total born outside Australia	46.3	209.9	256.1	55.0	16.8	328.0	10
Total	169.6	729.8	899.4	254.5	75.4	1,229.3	9

(a) For definitions, see page 2, paragraphs 8 and 9. (b) Comprises paid shiftwork, paid roster work and other paid arrangements but excludes "on call". (c) Within the four-week period. (d) United Kingdom, Ireland, Canada, U.S.A., New Zealand and South Africa.

* Less than 4,000. See page 19, paragraph 5.

TABLE 11. EMPLOYEES WHO WORKED IN THE EVENING/AT NIGHT (a) : MARITAL STATUS AND FULL-TIME OR PART-TIME STATUS (a), NOVEMBER 1976

Marital status	Full-time employees (a)			Part-time employees (a)			Total		
	Paid work (b)	Unpaid work	Total (c)	Paid work (b)	Unpaid work	Total (c)	Paid work (b)	Unpaid work	Total (c)
NUMBER ('000)									
Males —									
Married	12.0	*	14.3	397.5	165.7	610.0	409.5	167.0	624.4
Not married (d)	23.9	*	25.5	134.5	25.3	168.4	158.4	25.9	193.9
Total	35.9	*	39.8	532.1	191.0	778.4	567.9	192.9	818.2
Females —									
Married	94.6	8.8	108.6	96.3	30.7	133.3	191.0	39.6	241.8
Not married (d)	39.2	*	43.9	101.3	19.8	125.3	140.5	22.1	169.2
Total	133.9	11.1	152.5	197.6	50.5	258.6	331.5	61.6	411.1
Persons —									
Married	106.6	10.1	122.9	493.9	196.4	743.3	600.5	206.6	866.2
Not married (d)	63.1	*	69.4	235.8	45.1	293.7	298.9	47.9	363.1
Total	169.7	13.0	192.3	729.7	241.5	1,037.0	899.4	254.5	1,229.3
PROPORTION OF ALL EMPLOYEES (per cent) (e)									
Males —									
Married	0.5	*	0.7	18.2	7.6	27.9	18.7	7.6	28.6
Not married (d)	2.5	*	2.7	14.1	2.7	17.7	16.6	2.7	20.3
Total	1.1	*	1.3	16.9	6.1	24.8	18.1	6.1	26.1
Females —									
Married	8.5	0.8	9.8	8.7	2.8	12.0	17.2	3.6	21.7
Not married (d)	5.8	*	6.5	14.9	2.9	18.4	20.6	3.2	24.9
Total	7.5	0.6	8.5	11.0	2.8	14.4	18.5	3.4	22.9
Persons —									
Married	3.2	0.3	3.7	15.0	6.0	22.5	18.2	6.3	26.3
Not married (d)	3.9	*	4.2	14.4	2.8	18.0	18.3	2.9	22.2
Total	3.4	0.3	3.9	14.8	4.9	21.0	18.2	5.2	24.9

(a) For definitions, see page 2, paragraphs 8 and 9. (b) Comprises paid overtime, paid shiftwork, paid roster system and other paid arrangements but excludes "on call". (c) Includes employees "on call" not included in previous two columns. (d) Never married, widowed and divorced. (e) Employees in each group who had worked in the evening/at night as a proportion of all employees in the same group.

* Less than, or based on a figure less than 4,000. See page 19, paragraph 5.

TABLE 12. EMPLOYEES WHO WORKED IN THE EVENING/AT NIGHT (a) : FAMILY STATUS AND TYPE OF WORK (a), NOVEMBER 1976

Family status (a)	Paid work			Unpaid work	On call	Total	Average number of times worked (c)
	Overtime	Other (b)	Total				
— '000 —				— Number —			
MALES							
Member of a family	113.2	380.6	493.8	173.0	49.2	716.0	9
Husband	86.3	308.4	394.7	163.5	45.7	604.0	9
with dependent children (a) present	60.9	221.3	282.3	120.6	33.5	436.4	10
without dependent children (a) present	25.4	87.1	112.5	42.9	12.2	167.6	9
Not married (d) head of family	*	6.5	8.1	*	*	11.0	9
with dependent children (a) present	*	*	*	*	*	4.5	8
without dependent children (a) present	*	*	4.8	*	*	6.5	9
Student aged 15-20 years	*	9.0	9.3	*	*	9.9	5
Other child (e)	23.0	51.1	74.1	7.1	*	83.0	8
Other relative (parent, brother, etc.)	*	5.6	7.5	*	*	8.1	12
Not a member of a family (f)	13.4	60.8	74.1	19.9	8.2	102.2	10
Total	126.6	441.4	567.9	192.9	57.4	818.2	9
FEMALES							
Member of a family	34.4	232.8	267.2	45.0	13.7	326.0	8
Wife	17.7	163.5	181.2	37.3	10.5	229.0	9
Not married (d) head of family	*	15.9	18.4	*	*	23.4	10
with dependent children (a) present	*	10.8	12.5	*	*	15.9	9
without dependent children (a) present	*	5.1	5.9	*	*	7.5	11
Student aged 15-20 years	*	13.5	13.7	*	*	14.5	5
Other child (e)	13.0	37.1	50.1	4.1	*	54.6	7
Other relative (parent, sister, etc.)	*	*	*	*	*	4.5	7
Not a member of a family (f)	8.6	55.6	64.2	16.6	4.4	85.1	9
Total	43.0	288.4	331.5	61.6	18.0	411.1	9

(a) For definitions, see pages 2 and 3, paragraphs 8-13. (b) Comprises paid shiftwork, paid roster system and other paid arrangements but excludes "on call". (c) Within the four-week period. (d) Never married, widowed, divorced and permanently separated. (e) Of any age. (f) Persons living alone or not related to any other member of the household in which they were living.

* Less than 4,000. See page 19, paragraph 5.

TABLE 13. EMPLOYEES WHO WORKED PAID SHIFTWORK, PAID ROSTER SYSTEM OR OTHER PAID ARRANGEMENTS (a) IN THE EVENING/AT NIGHT (b) : CHANGE IN STARTING TIME AND FREQUENCY, NOVEMBER 1976

Change in work starting time (c)	Number of times worked (c)						Total	Average number of times worked (c)
	One	2-5	6-10	11-15	16-20	21 and over		
	- '000 -							- Number -
No change in starting time	11.6	67.6	43.0	23.8	98.5	20.3	264.7	12
Changed starting time -								
Starting time changed regularly -								
Each fortnight	*	6.2	15.5	5.0	*	*	28.2	9
Each week	*	28.9	68.5	43.9	12.8	4.2	161.0	10
Each day	6.5	42.3	39.3	20.0	12.3	4.3	124.7	9
Total regular changes	9.8	77.4	123.3	68.8	25.7	8.8	313.9	10
Starting time changed, but not regularly -								
Once	*	5.6	*	*	*	*	13.5	8
2-5 times	*	20.1	17.1	11.6	10.3	*	64.6	10
6-10 times	*	9.0	15.1	7.0	6.9	*	41.8	10
11 or more times	*	6.1	10.6	7.0	5.2	*	31.3	10
Total irregular changes	6.1	40.6	45.2	27.8	24.0	7.4	151.2	10
Total changed starting time	16.0	118.0	168.5	96.6	49.7	16.2	465.1	10
Total	27.5	185.6	211.5	120.4	148.2	36.5	729.8	11

For footnotes see Table 14.

* Less than 4,000. See page 19, paragraph 5.

TABLE 14. EMPLOYEES WHO WORKED PAID SHIFTWORK, PAID ROSTER SYSTEM OR OTHER PAID ARRANGEMENTS (a) IN THE EVENING/AT NIGHT (b) : CHANGE IN STARTING TIME AND INDUSTRY, NOVEMBER 1976

Change in work starting time (c)	Males			Females			Persons			Proportion of total
	Manu- facturing	Other industries	Total	Manu- facturing	Other industries	Total	Manu- facturing	Other industries	Total	
	- '000 -									- per cent -
No change in starting time	41.9	96.9	138.8	12.4	113.5	125.9	54.3	210.4	264.7	36.3
Changed starting time -										
Starting time changed regularly -										
Each fortnight	8.1	11.1	19.2	*	7.7	9.0	9.4	18.8	28.2	3.9
Each week	57.6	72.5	130.1	4.9	26.0	30.9	62.5	98.5	161.0	22.1
Each day	*	56.5	60.3	*	63.1	64.4	5.1	119.6	124.7	17.1
Total regular changes	69.5	140.1	209.6	7.6	96.8	104.3	77.1	236.8	313.9	43.0
Starting time changed, but not regularly -										
Once	4.3	5.5	9.8	*	*	*	4.4	9.1	13.5	1.9
2-5 times	13.6	28.9	42.5	*	21.2	22.1	14.5	50.1	64.6	8.9
6-10 times	4.0	19.4	23.4	*	17.8	18.4	4.6	37.2	41.8	5.7
11 or more times	*	15.0	17.2	*	13.8	14.0	*	28.8	31.3	4.3
Total irregular changes	24.1	68.9	93.0	*	56.4	58.2	25.9	125.3	151.2	20.7
Total changed starting time	93.6	208.9	302.6	9.3	153.2	162.5	103.0	362.1	465.1	63.7
Total	135.6	305.8	441.4	21.7	266.7	288.4	157.3	572.5	729.8	100.0

(a) Excludes employees who worked paid overtime, unpaid work or "on call" in the evening/at night. See page 2, paragraph 4. (b) For definition, see page 2, paragraph 8. (c) Within the four-week period.

* Less than 4,000. See page 19, paragraph 5.

TABLE 15. EMPLOYEES WHO WORKED PAID SHIFTWORK, PAID ROSTER SYSTEM OR OTHER PAID ARRANGEMENTS (a) IN THE EVENING/AT NIGHT (b) : STARTING TIME AND INDUSTRY, NOVEMBER 1976

Industry	Regular starting time					Variable starting time	Total
	5.30a.m. to 11.59a.m.	Noon to 3.59p.m.	4.00p.m. to 9.59p.m.	10.00p.m. to 5.29a.m.	Total		
NUMBER ('000)							
Males —							
Manufacturing	4.1	11.1	15.3	11.5	41.9	93.6	135.6
Other industries	45.4	11.2	22.7	17.6	96.9	208.9	305.8
Total	49.4	22.2	38.0	29.1	138.8	302.6	441.4
Females —							
Manufacturing	*	4.6	4.9	*	12.4	9.3	21.7
Other industries	34.9	14.5	48.7	15.4	113.5	153.2	266.7
Total	35.4	19.1	53.7	17.8	125.9	162.5	288.4
Persons —							
Manufacturing	4.6	15.7	20.2	13.9	54.3	103.0	157.3
Other industries	80.2	25.6	71.5	33.0	210.4	362.1	572.5
Total	84.8	41.3	91.7	46.9	264.7	465.1	729.8
PROPORTION OF TOTAL (per cent)							
Males —							
Manufacturing	3.0	8.2	11.3	8.5	30.9	69.1	100.0
Other industries	14.8	3.6	7.4	5.8	31.7	68.3	100.0
Total	11.2	5.0	8.6	6.6	31.4	68.6	100.0
Females —							
Manufacturing	*	21.1	22.6	*	57.0	43.0	100.0
Other industries	13.1	5.4	18.3	5.8	42.6	57.4	100.0
Total	12.3	6.6	18.6	6.2	43.7	56.3	100.0
Persons —							
Manufacturing	2.9	10.0	12.8	8.8	34.5	65.5	100.0
Other industries	14.0	4.5	12.5	5.8	36.7	63.3	100.0
Total	11.6	5.7	12.6	6.4	36.3	63.7	100.0

For footnotes see Table 16.

* Less than, or based on a figure less than 4,000. See page 19, paragraph 5.

TABLE 16. EMPLOYEES WHO WORKED PAID SHIFTWORK, PAID ROSTER SYSTEM OR OTHER PAID ARRANGEMENTS (a) IN THE EVENING/AT NIGHT (b) : DISTANCE TO WORK, STARTING TIME AND MARITAL STATUS, NOVEMBER 1976

Distance to work (kilometres)	Regular starting time					Variable starting time	Total	Proportion of total
	5.30a.m. to 11.59a.m.	Noon to 3.59p.m.	4.00p.m. to 9.59p.m.	10.00p.m. to 5.29a.m.	Total			
— '000 —						— per cent —		
MARRIED								
No set place of work	*	*	*	*	5.4	10.8	16.1	3.3
Less than 1	7.2	*	4.7	*	15.6	25.7	41.3	8.4
1 and less than 2	7.4	4.7	9.0	5.1	26.1	37.5	63.6	12.9
2 and less than 8	17.9	10.6	20.4	11.8	60.7	93.0	153.7	31.3
8 and less than 16	11.4	8.0	12.4	5.6	37.4	74.2	111.6	22.7
16 and less than 32	7.3	5.0	9.4	4.5	26.2	50.2	76.3	15.5
32 and over	*	*	*	4.0	11.0	18.2	29.2	5.9
Total	57.3	31.4	59.3	34.3	182.4	309.6	491.9	100.0
NOT MARRIED (c)								
No set place of work	*	*	*	*	*	5.5	6.9	2.9
Less than 1	*	*	4.6	*	12.7	27.5	40.2	16.9
1 and less than 2	*	*	6.9	*	14.4	23.4	37.8	15.9
2 and less than 8	8.5	*	11.1	*	26.3	46.8	73.1	30.7
8 and less than 16	7.5	*	5.4	*	16.9	29.7	46.6	19.6
16 and less than 32	*	*	*	*	7.3	17.3	24.6	10.4
32 and over	*	*	*	*	*	5.3	8.6	3.6
Total	27.5	9.9	32.3	12.6	82.3	155.5	237.8	100.0
TOTAL								
No set place of work	4.0	*	*	*	6.7	16.3	23.0	3.2
Less than 1	11.0	*	9.3	5.8	28.3	53.3	81.6	11.2
1 and less than 2	11.1	6.1	15.9	7.5	40.5	60.9	101.4	13.9
2 and less than 8	26.4	14.3	31.5	14.9	87.1	139.8	226.8	31.1
8 and less than 16	18.9	10.2	17.8	7.5	54.3	103.9	158.2	21.7
16 and less than 32	9.9	6.2	12.3	5.1	33.5	67.5	101.0	13.8
32 and over	*	*	*	5.0	14.3	23.5	37.8	5.2
Total	84.8	41.3	91.7	46.9	264.7	465.1	729.8	100.0

(a) Excludes employees who worked paid overtime, unpaid work or "on call" in the evening/at night. See page 2, paragraph 4. (b) For definition, see page 2, paragraph 8. (c) Never married, widowed and divorced.

* Less than 4,000. See page 19, paragraph 5.

TABLE 17. EMPLOYEES WHO WORKED PAID SHIFTWORK, PAID ROSTER SYSTEM OR OTHER PAID ARRANGEMENTS (a) IN THE EVENING OR AT NIGHT (b) : PROPORTION REPORTING EACH ADVANTAGE AND DISADVANTAGE AND AGE, NOVEMBER 1976

	(per cent)					
Advantages and disadvantages reported	Age (years)					Total
	15-24	25-34	35-44	45-54	55 and over	
MALES						
Advantages of evening and night work reported –						
None	37.9	32.0	38.5	50.0	46.9	39.3
Financial	20.7	25.9	35.3	26.8	*	25.7
Hours suit family or personal routine	35.3	48.1	47.4	46.5	*	43.4
Other	*	*	*	*	*	8.3
Disadvantages of evening and night work reported –						
None	36.2	38.6	27.7	48.1	44.2	38.1
Health (c)	*	25.7	34.3	25.8	*	25.0
Family	*	28.2	46.3	25.4	*	27.4
Limits social life	40.5	33.2	45.2	47.6	*	39.2
Transport and other	*	*	*	*	*	8.7
FEMALES						
Advantages of evening and night work reported –						
None	20.6	*	*	*	*	19.7
Financial	19.8	*	*	*	*	13.2
Hours suit family or personal routine	61.4	85.7	66.9	61.2	*	68.9
Other	*	*	*	*	*	*
Disadvantages of evening and night work reported –						
None	45.5	60.7	51.0	58.4	*	53.0
Health (c)	*	*	*	*	*	9.3
Family	*	27.2	*	*	*	17.1
Limits social life	35.3	24.0	*	*	*	23.9
Transport and other	*	*	*	*	*	7.2
PERSONS						
Advantages of evening and night work reported –						
None	28.9	25.4	32.9	42.7	36.8	31.5
Financial	20.3	20.6	24.4	21.8	*	20.8
Hours suit family or personal routine	48.8	62.0	54.6	51.3	40.5	53.5
Other	*	*	*	*	*	5.8
Disadvantages of evening and night work reported –						
None	41.0	46.8	36.4	51.4	47.5	43.9
Health (c)	13.9	18.6	26.2	18.5	*	18.8
Family	10.5	27.8	35.7	24.2	*	23.3
Limits social life	37.8	29.8	33.1	37.5	*	33.2
Transport and other	7.8	7.3	*	*	*	(d)8.1

(a) Excludes employees who worked paid overtime, unpaid work or "on call" in the evening or at night. See page 2, paragraph 4. (b) For definition, see page 2, paragraph 8. (c) Includes "problem sleeping". (d) Includes transport 3.1 per cent.

* Based on a figure less than 15,000. See page 19, paragraph 5.

NOTE: Components for each category of employee in Tables 17-19 will not total 100.0 per cent because some respondents reported more than one advantage or disadvantage.

TABLE 18. EMPLOYEES WHO WORKED PAID SHIFTWORK, PAID ROSTER SYSTEM OR OTHER PAID ARRANGEMENTS (a) IN THE EVENING OR AT NIGHT (b): PROPORTION REPORTING EACH ADVANTAGE AND DISADVANTAGE AND MARITAL STATUS, NOVEMBER 1976

(per cent)

Advantages and disadvantages reported	Males			Females			Persons		
	Married	Not married (c)	Total	Married	Not married (c)	Total	Married	Not married (c)	Total
Advantages of evening and night work reported –									
None	38.2	41.9	39.3	18.7	21.2	19.7	31.4	31.7	31.5
Financial	28.8	17.6	25.7	8.8	19.6	13.2	21.8	18.6	20.8
Hours suit family or personal routine	46.0	36.7	43.4	74.6	60.7	68.9	55.9	48.5	53.5
Other	8.7	*	8.3	*	*	*	6.6	*	5.8
Disadvantages of evening and night work reported –									
None	36.5	42.2	38.1	54.6	50.5	53.0	42.8	46.3	43.9
Health (d)	27.3	19.1	25.0	9.9	*	9.3	21.2	13.8	18.8
Family	37.2	*	27.4	26.5	*	17.1	33.5	*	23.3
Limits social life	37.7	43.3	39.2	17.3	33.7	23.9	30.6	38.6	33.2
Transport	*	*	*	*	*	*	3.1	*	3.1
Other	5.3	*	5.6	*	*	*	4.6	*	5.0

(a) Excludes employees who worked paid overtime, unpaid work or "on call" in the evening or at night. See page 2, paragraph 4. (b) For definition, see page 2, paragraph 8. (c) Never married, widowed and divorced. (d) Includes "problem sleeping".

* Based on a figure less than 15,000. See page 19, paragraph 5.

TABLE 19. EMPLOYEES WHO WORKED PAID SHIFTWORK, PAID ROSTER SYSTEM OR OTHER PAID ARRANGEMENTS (a) IN THE EVENING OR AT NIGHT (b): PROPORTION REPORTING EACH ADVANTAGE AND DISADVANTAGE AND FAMILY STATUS (c), NOVEMBER 1976

(per cent)

Family status (c)	Advantages reported				Disadvantages reported				
	None	Financial	Hours (d)	Other	None	Health (e)	Family	Limits social life	Transport and other
Member of a family (f)	31.7	21.4	54.8	6.4	44.5	20.0	27.5	32.7	7.2
Husband	38.8	29.0	46.7	8.6	36.8	28.0	38.4	38.0	8.4
With dependent children (c) present	35.6	30.2	49.1	8.4	34.2	28.4	41.6	37.4	9.0
Without dependent children (c) present	47.0	26.0	40.8	*	43.5	27.1	30.2	39.8	*
Wife	18.1	*	74.9	*	54.4	9.4	27.6	17.3	*
Student aged 15-20 years	*	*	79.2	*	70.6	*	*	*	*
Other child (g)	40.1	*	39.6	*	42.5	18.0	*	44.2	*
Not a member of a family (h)	30.8	17.6	46.6	*	41.1	*	*	35.6	12.9
Total	31.5	20.8	53.5	5.8	43.9	18.8	23.3	33.2	8.1

(a) Excludes employees who worked paid overtime, unpaid work or "on call" in the evening or at night. See page 2, paragraph 4. (b) For definition see page 2, paragraph 8. (c) For definitions, see page 3, paragraphs 11-13. (d) "Hours suit family or personal routine". (e) Includes "problem sleeping". (f) Includes not married heads of families, and other relatives (parent, brother, etc.) not shown separately. (g) Of any age. (h) Persons living alone or not related to any other member of the household in which they were living.

* Based on a figure less than 15,000. See page 19, paragraph 5.

TECHNICAL NOTE

Estimation procedure

The estimates are derived from the quarterly population survey by use of a complex ratio estimation procedure, which ensures that the survey estimates conform to an independently estimated distribution of the population by age and sex, rather than to the age and sex distribution within the sample itself.

Reliability of the estimates

2. Since the estimates in this bulletin are based on information obtained from occupants of a sample of dwellings, they may differ from the figures that would have been produced if the information had been obtained from occupants of all dwellings. One measure of the likely difference is given by the *standard error*, which indicates the extent to which an estimate might have varied by chance because only a sample of dwellings was included in the survey. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained if all dwellings had been included in the survey, and about nineteen chances in twenty that the difference will be less than two standard errors.

3. Space does not allow for the separate indication of the standard errors of all estimates in this bulletin. A table of *standard errors* for general application to sample estimates is given below. The figures in this table will not give a precise measure of the standard error of a particular estimate since they are averages based on calculations for a limited number of past surveys over a wide range of labour force characteristics. However, they will provide an indication of the magnitude of the standard error of any particular estimate for any particular survey. An example of the use of the table is as follows: if, in Tables 1-16, an estimate obtained from the sample is 100,000 then the standard error is 3,000

and there are about two chances in three that the true figure is within the range 97,000 to 103,000 and about nineteen chances in twenty that this figure is between 94,000 and 106,000.

4. The reliability of an estimated percentage, computed by using sample data for both numerator and denominator, depends upon both the size of the numerator and the size of the denominator. However, the per cent standard error of the estimated percentage will generally be lower than the per cent standard error of the estimate of the numerator. The per cent standard errors of the numerators can be obtained from the table below.

5. As the standard errors in the table below show, *the smaller the estimate the higher is the relative standard error*. Very small estimates are thus subject to such high standard errors (relative to the size of the estimate) as to detract seriously from their value for most reasonable uses. In the tables in this bulletin, estimates below the levels shown in the table below have not been included. Although figures for these small components can in some cases be derived by subtraction, they should not be regarded as reliable.

6. The imprecision due to sampling variability, which is measured by the standard error, should not be confused with inaccuracies that may occur because of imperfections in reporting by interviewers and respondents. Inaccuracies of this kind are referred to as the *non-sampling error*, and they may occur in any enumeration, whether it be a full count or only a sample. Every effort is made to reduce the non-sampling error to a minimum by careful design of questionnaires, intensive training and supervision of interviewers and efficient operating procedures.

STANDARD ERRORS OF ESTIMATES - AUSTRALIA

Size of estimate (persons)	Tables 1-16		Tables 17-19	
	No.	Per cent of estimate	No.	Per cent of estimate
4,000	800	20.0		
5,000	900	18.0		
10,000	1,200	12.0		
15,000	1,400	9.5	3,100	21.0
20,000	1,600	8.0	3,600	18.0
50,000	2,300	4.6	5,400	11.0
100,000	3,000	3.0	7,300	7.3
200,000	4,000	2.0	10,000	5.0
500,000	6,000	1.2	15,000	3.0
1,000,000	8,000	0.8	21,000	2.1
2,000,000	10,000	0.5	28,000	1.4

— Estimates below the levels indicated have not been published; see paragraph 5 above.

